



NUCLEAR ENERGY INSTITUTE

Alexander Marion  
DIRECTOR  
ENGINEERING DEPARTMENT  
NUCLEAR GENERATION DIVISION

November 2, 2001

Mr. William H. Bateman  
Materials and Chemical Engineering Branch  
Office of Nuclear Reactor Regulation  
Mail Stop O9-H6  
U. S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

**SUBJECT:** Industry Proposal for Steam Generator Inspection Interval  
Regulatory Controls

**PROJECT NUMBER: 689**

Dear Mr. Bateman:

On December 11, 2000, NEI submitted a revised Steam Generator Program Generic License Change Package (GLCP) for NRC review and endorsement. In the last several months, the NRC raised concerns with the GLCP's provisions for regulatory control over steam generator inspection intervals. In August the NRC proposed a change to the administrative technical specifications in the GLCP that added controls over inspection intervals. The purpose of this letter is to submit industry's counter-proposal on this subject.

The industry proposes to establish regulatory control over steam generator inspection intervals by means of a docketed commitment instead of a technical specification. The commitment would be included in the license amendment request that implements the GLCP, and would consist of the following three parts:

1. A commitment to a maximum inspection interval based on tubing material - The proposed inspection intervals for all tubing materials would be established with the staff concurrence as part of the GLCP development.
2. A commitment to submit a report to the NRC that documents the basis for any planned inspection interval that will exceed the committed interval. This report would be submitted to the NRC at least one year prior to exceeding the committed interval.
3. A commitment to not change the above two commitments without prior notification of the NRC.

Do 46

Mr. William H. Bateman

November 2, 2001

Page 2

The specific commitment wording is contained in the license amendment cover letter template in Enclosure 1.

The industry believes that its approach has several advantages over the NRC's proposed administrative technical specification controls:

- These commitments will be managed in accordance with NEI 99-04, *Guidelines for Managing NRC Commitment Changes*, which has been accepted by the NRC (Reference RIS 2000-17).
- The industry proposal ensures that the NRC is aware of any planned extensions of standard inspection intervals. The timing of the notification provides ample opportunity for NRC review of the supporting documentation, communication with the licensee, and use of the 10CFR2.202 order process if a specific instance warrants such action.
- Our proposal enjoys broad industry support. Many licensees are opposed to any technical specification controls over inspection intervals, especially if the process includes NRC approval. Licensees are concerned about the lengthy NRC approval times that have been experienced during several recent alternate repair criteria and tube repair method submittals. The NRC's proposal for extended inspection intervals is only viable if there is a probability of obtaining a timely approval of submitted changes.
- The industry proposal provides a path to expedited approval and adoption of the GLCP. The GLCP is generally acknowledged as an improvement over existing technical specifications.
- The industry proposal facilitates the efficient use of NRC resources. The NRC need not write a safety evaluation for every new proposed extension to inspection intervals. The NRC will have the flexibility to apply its resources only where specific attention is warranted.
- Our proposal provides flexibility to incorporate new experience and knowledge into the SG inspection requirements as expeditiously as possible. This facilitates efficient plant operation.
- Our proposal maintains industry control over steam generator program requirements. NRC endorsement or *de facto* control over parts of the EPRI Guidelines is avoided.

Industry met with your staff on November 1<sup>st</sup> to discuss the above proposal. We understand that you will have comments on our approach and that you will provide a written response to this letter so that we may fully understand your concerns with our proposal.

Mr. William H. Bateman

November 2, 2001

Page 3

Please contact Jim Riley 202-739-8137, [jhr@nei.org](mailto:jhr@nei.org) or me, if you have any questions regarding this matter.

Sincerely,

A handwritten signature in cursive script that reads "Alex Marion".

Alex Marion

JHR/maa

Enclosure

c: Dr. Brian W. Sheron, U. S. Nuclear Regulatory Commission  
Mr. Jack R. Strosnider, Jr., U. S. Nuclear Regulatory Commission  
Mr. Edmund J. Sullivan, U. S. Nuclear Regulatory Commission  
Ms. Louise Lund, U. S. Nuclear Regulatory Commission  
Mr. Emmett Murphy, U. S. Nuclear Regulatory Commission  
Mr. Kenneth Karwoski, U. S. Nuclear Regulatory Commission  
Ms. Maitri Banerjee, U. S. Nuclear Regulatory Commission

**Industry Proposal  
for  
Steam Generator Inspection Interval  
Regulatory Controls**

# **Template for a Plant Specific License Amendment Cover Letter**

## **Revision to NRC Submittal**

**Changes with respect to the December 11, 2000 version  
are bold blue font.**

**The inspection interval commitment is in bold red  
underlined font.**

[Month Day, 2002]

U.S. Nuclear Regulatory Commission  
Washington, DC 20555

**ATTENTION:** Document Control Desk

**SUBJECT:** [Plant, Docket Number]  
License Amendment Request: Revision to Steam Generator  
Technical Specifications

**REFERENCES:**

Pursuant to 10 CFR 50.90, [Licensee] hereby requests an amendment to Operating License Number [DPR-XX] to incorporate the changes described below into the Technical Specifications for [Plant].

The proposed amendment **adds a technical specification for Steam Generator Tube Integrity [3.4.20] as a replacement for** the steam generator Technical Specification [3.4.6] and revises the Technical Specifications for RCS Operational Leakage [3.4.13], Steam Generator Tube Surveillance Program [5.5.9], and Steam Generator Tube Inspection Report [5.6.10].

The proposed amendment is necessary in order to implement the requirements of the Industry Initiative on NEI 97-06, Steam Generator Program Guidelines. The proposed changes reflect the results of a series of meetings between the NRC Staff and The Nuclear Energy Institute's Steam Generator Task Force.

This amendment request provides a programmatic framework for monitoring and maintaining the integrity of the steam generator tubes consistent with Appendices A and B to 10 CFR Part 50 and [Plant's] licensing basis. This framework includes performance criteria that, if satisfied, provide reasonable assurance that tube integrity is being maintained consistent with the licensing basis. In addition, this framework provides for monitoring and maintaining the tubes to provide reasonable

assurance that the performance criteria are met at all times between scheduled inspections of the tubes.

### **DESCRIPTION OF PROPOSED CHANGE**

Steam generator Technical Specification [3.4.6] is deleted by this request. The requirements of Technical Specification [3.4.6] are revised and relocated into a **Steam Generator Tube Integrity Technical Specification [3.4.20]**. **This new Technical Specification and its Bases** defines the approved steam generator performance criteria, repair criteria, and repair methods and establishes actions that would be necessary should the performance criteria not be met. Changes to the **Steam Generator Tube Integrity Technical Specification Bases** will be governed by the requirements of 10 CFR 50.59.

Surveillance requirement 3.4.20.1 refers to the Steam Generator Program for its frequency. In addition to Steam Generator Program frequency requirements, [Plant] commits to conducting required steam generator inspections of tubing and/or sleeves at an interval not to exceed [X (600 MA) / Y (600 TT / 800) / Z (690 TT)]. If [Plant] intends to exceed this interval, a special report documenting the basis for the next inspection interval will be submitted to the NRC within 90 days after the start of the last refueling cycle prior to exceeding the committed inspection interval. In no case will this report be submitted less than [one year] prior to exceeding the commitment. [Plant] will not change this commitment without prior notification to the NRC.

Technical Specifications [3.4.13, 5.5.9, and 5.6.10] are revised as described below.

The changes to the Operational Leakage Technical Specification reduce the allowable leakage from any one steam generator to *[150 gallons per day]* and reference the plant's Steam Generator Program described in Technical Specification [5.5.9] for the surveillance requirements necessary to verify **primary-to-secondary leakage**. The proposed amendment also deletes the existing LCO 3.4.13.d since it is enveloped by the revised LCO and revises the Conditions and Surveillances to clarify the requirements related to primary-to-secondary leakage.

The changes to Administrative Technical Specification [5.5.9], **Steam Generator Program**, require the implementation of a Steam Generator Program and **identify several key elements of the Program: condition monitoring, steam generator performance criteria, alternate repair criteria, and repair methods**. The change removes the detailed inspection requirements from the Technical Specifications and replaces them with the essential elements of a program. In addition, this section defines the approval process for revising the performance criteria, tube repair criteria and repair methods.

Finally, the change to Technical Specification [5.6.10] defines the requirement for, and contents of the steam generator tube inspection report. The existing requirement for a twelve month report is changed to a 120 day report, submitted only if the number of tubes exceeding the repair criteria during scheduled inservice inspections exceeds 1 percent of those inspected.

The content of the Steam Generator Program as discussed in this submittal is critical to the satisfactory maintenance of steam generator tube integrity. [Plant's] Steam Generator Program will meet the intent of the guidance provided in the Steam Generator Integrity Elements section of NEI 97-06, Steam Generator Program Guidelines, as it may be revised from time to time. The basis for any deviations from the intent of NEI 97-06 or its referenced EPRI guideline documents will be documented internally as part of the program implementation. This approach will be documented as a commitment in [Plant's] [Commitment Tracking System].

This proposed revision would enhance the safety function of the steam generators by increasing the probability that the integrity of the steam generator tubes will be maintained between scheduled inservice inspections.

## **REQUESTED CHANGES**

**Delete technical specification [3.4.6].** Revise Technical Specifications [3.4.13, 5.5.9, and 5.6.10] as shown in the attached marked-up Technical Specifications pages in Enclosure X. **Add the Steam Generator Tube Integrity Technical Specification [3.4.20] in Enclosure Y.**

## **SCHEDULE**

Approval of the proposed technical specification amendment is requested by [MM/YY] in order to allow implementation of the associated requirements for scheduled refueling outages after [MM/YY].

## **ASSESSMENT AND REVIEW**

[Licensee] has evaluated the significant hazards considerations associated with the proposed license amendment, as required by 10 CFR 50.92, and has determined that there are none (see Enclosure (2) for a complete discussion). [Licensee] has also determined that operation with the proposed changes will not result in any significant increases in the amounts of any effluents that may be released offsite, and no significant increases in individual or cumulative occupational radiation exposure. Therefore, the proposed amendment is eligible for categorical exclusion as set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental



impact statement or environmental assessment is needed in connection with the approval of the proposed change. The [Plant Operations and Safety Review Committee] has reviewed this proposed amendment and concurs that operation with the proposed modification will not result in an undue risk to the health and safety of the public.

Should you have any questions regarding this matter, we will be pleased to discuss them with you.

Very Truly Yours,

Enclosures: ( ) Summary Description and Safety Analysis  
( ) Determination of Significant Hazards  
( ) Technical Specification Marked-up Pages  
( ) **Steam Generator Tube Integrity Technical Specification**